

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT																		
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT																		
<b>CONVEYING PARTY DATA</b>																			
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Yuelin Shen</td> <td>07/05/2011</td> </tr> <tr> <td>Youhe Zhang</td> <td>06/23/2011</td> </tr> <tr> <td>Yuri Burhan</td> <td>06/13/2011</td> </tr> <tr> <td>Michael A. Siracki</td> <td>06/14/2011</td> </tr> <tr> <td>Mahavir Nagarai</td> <td>06/11/2011</td> </tr> <tr> <td>Bala Durairajah</td> <td>06/13/2011</td> </tr> <tr> <td>Scott D. McDonough</td> <td>06/22/2011</td> </tr> <tr> <td>Peter Thomas Cariveau</td> <td>06/24/2011</td> </tr> </tbody> </table>		Name	Execution Date	Yuelin Shen	07/05/2011	Youhe Zhang	06/23/2011	Yuri Burhan	06/13/2011	Michael A. Siracki	06/14/2011	Mahavir Nagarai	06/11/2011	Bala Durairajah	06/13/2011	Scott D. McDonough	06/22/2011	Peter Thomas Cariveau	06/24/2011
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<b>RECEIVING PARTY DATA</b>																			
<b>Name:</b>	Smith International, Inc.																		
<b>Street Address:</b>	1310 Rankin Road																		
<b>City:</b>	Houston																		
<b>State/Country:</b>	TEXAS																		
<b>Postal Code:</b>	77073																		
<b>PROPERTY NUMBERS Total: 1</b>																			
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13152626</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13152626														
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<b>CORRESPONDENCE DATA</b>																			
<b>Fax Number:</b>	(713)228-8778																		
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																			
<b>Phone:</b>	713-228-8600																		
<b>Email:</b>	landgraf@oshaliang.com																		
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<b>Address Line 1:</b>	909 Fannin Street, Suite 3500																		
<b>Address Line 4:</b>	Houston, TEXAS 77010																		
<b>ATTORNEY DOCKET NUMBER:</b>	05516/463002																		

OP \$40.00 13152626

**501629303**

**PATENT**  
**REEL: 026765 FRAME: 0146**

NAME OF SUBMITTER:

Traci Landgraf

Total Attachments: 3

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## ASSIGNMENT – WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") hereby assign, transfer, and set over to:

Smith International, Inc.

having the following address:

1310 Rankin Rd.  
Houston, Texas 77073

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention known by the following title:

### ROLLING CUTTER ASSEMBLED DIRECTLY TO THE BIT POCKETS

for which the undersigned has/have executed an application for patent in the United States of America on or about this same day, together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all Letters Patent (domestic and foreign) which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(S) if this assignment had not been made.

In addition, the undersigned INVENTOR(S) each hereby agrees:

1. To sign and execute any further documents which may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
2. To execute all papers and documents and to perform all lawful acts which may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
3. To perform all lawful affirmative acts which may be necessary to obtain the grant of a valid and enforceable patent to COMPANY.

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, or reissue thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of OSHA LIANG LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

OSHA

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

<u>7/5/11</u> Date	1 <sup>st</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Yuelin Shen</u>
<u>6/23/11</u> Date	2 <sup>nd</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Youhe Zhang</u>
<u>6/13/11</u> Date	3 <sup>rd</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Yuri Burhan</u>
<u>6/14/11</u> Date	4 <sup>th</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Michael A. Siracki</u>
<u>06/11/2011</u> Date	5 <sup>th</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Mahavir Nagarai</u>
<u>06/13/2011</u> Date	6 <sup>th</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Bala Durairajah</u>
<u>6/22/11</u> Date	7 <sup>th</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Scott D. McDonough</u>
<u>6/24/11</u> Date	8 <sup>th</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Peter Thomas Cariveau</u>

**NOTARY PUBLIC**

**WITNESSES**

State of Texas  
County of Harris

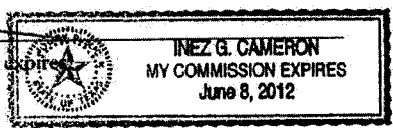
Before me personally appeared:

<u>Yuelin Shen</u> 1 <sup>st</sup> Inventor	<u>Youhe Zhang</u> 2 <sup>nd</sup> Inventor
<u>Yuri Burhan</u> 3 <sup>rd</sup> Inventor	<u>Michael A. Siracki</u> 4 <sup>th</sup> Inventor
<u>Mahavir Nagarai</u> 5 <sup>th</sup> Inventor	<u>Bala Durairajan</u> 6 <sup>th</sup> Inventor
<u>Scott D. McDonough</u> 7 <sup>th</sup> Inventor	<u>Peter Thomas Cariveau</u> 8 <sup>th</sup> Inventor

each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: 6/11, 13, 14, 22, 23, 24 + 7/5/11

[Signature]  
Notary Public My commission expires



Signature of Witness: \_\_\_\_\_  
Date: \_\_\_\_\_  
Print or Type Name: \_\_\_\_\_

Signature of Witness: \_\_\_\_\_  
Date: \_\_\_\_\_  
Print or Type Name: \_\_\_\_\_

When this Assignment is not filed concurrently with the patent application,  
the following identifying information may be added after execution:

*U.S. Application Serial No.:* 13/152626  
*Filing Date:* 06/03/2011